

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

No. 126, Original

In The
Supreme Court of the United States

DEPOSITION OF JOEL HAMILTON, PH.D

STATE OF KANSAS,

Plaintiff,

v.

STATE OF NEBRASKA

and

STATE OF COLORADO,
Defendants.

Tuesday, June 26, 2012

9:00 a.m.

PURSUANT TO NOTICE and the Federal Rules of Civil
Procedure, the above-entitled deposition was taken on
behalf of Defendant State of Nebraska, at 1525 Sherman
Street, 7th Floor, Denver, Colorado, before Katherine
Richmond, Certified Court Reporter and Notary Public
within Colorado.

1 APPEARANCES:

2 For the Plaintiff:

JOHN B. DRAPER, ESQ.

Montgomery & Andrews, PA

325 Paseo de Peralta

Santa Fe, New Mexico 87501

(505) 982-3873

BURKE W. GRIGGS, ESQ.

Kansas Department of Agriculture

109 SW 9th Street, 4th Floor

Topeka, Kansas 66612

(785) 296-4646

For the Defendant State of Nebraska:

DON BLANKENAU, ESQ.

Blankenau Wilmoth LLP

206 South 13th Street, Suite 1425

Lincoln, Nebraska 68508

(402) 475-7080

BLAKE E. JOHNSON, ESQ.

JUSTIN D. LAVENE, ESQ.

Assistant Attorneys General

Office of the Attorney General

2115 State Capitol

Lincoln, Nebraska 68509-8920

For the Defendant State of Colorado:

SCOTT STEINBRECHER, ESQ.

Assistant Attorney General

Office of the Attorney General

1525 Sherman Street, 7th Floor

Denver, Colorado 80203

(303) 866-5032

Also Present: Brian Dunnigan

Jasper Fanning

Donna Ormerod

Dale Book

Henry Robison

2 EXAMINATION PAGE

3 June 26, 2012

4 By Mr. Blankenau 4

5 By Mr. Steinbrecher --

6 By Mr. Draper --

7
8 EXHIBITS INITIAL REFERENCE

1 Notice of Deposition of Joel R. 4
9 Hamilton and Subpoena Duces Tecum

10 2 Rebuttal Report Prepared By 5
11 Dr. Joel R. Hamilton and
12 Dr. M. Henry Robinson

13 3 Output from STATA stgatistical package 28
14 Sunding Yield Regression Results (Excel sheet)

15 4 Summary of Sunding Simulation 29
16
17
18
19
20
21
22
23
24
25

1 PROCEEDINGS

2 JOEL HAMILTON, Ph.D,

3 being first duly sworn to tell the truth, testified as

4 follows:

5 DIRECT EXAMINATION

6 BY MR. BLANKENAU:

7 Q. Good morning, Dr. Hamilton.

8 A. Good morning.

9 Q. I suppose for the record we ought to have you

10 state your full name and spell your last name.

11 A. My name is Joel Hamilton, H-A-M-I-L-T-O-N.

12 MR. BLANKENAU: Thank you. I'm going to hand you

13 what we're going to have marked as Exhibit No. 1.

14 (Deposition Exhibit 1 was marked.)

15 Q. (By Mr. Blankenau) Do you recognize that

16 document?

17 A. Yes, I do.

18 Q. What is it, please.

19 A. It is the Notice of Deposition of Joel R.

20 Hamilton and Subpoena -- and my Latin fails me at this

21 point.

22 Q. Would duces tecum be an approximate pronunciation

23 for that?

24 A. Duces tecum?

25 Q. Good enough.

5

1 This Notice of Deposition and Subpoena requested

2 you to bring any other additional materials. Did you

3 bring any such materials?

4 A. No, I did not.

5 MR. BLANKENAU: And then I'll hand what we'll
6 have marked as Exhibit 2.

7 (Deposition Exhibit 2 was marked.)

8 Q. (By Mr. Blankenau) Dr. Hamilton, do you
9 recognize that document?

10 A. Yes, I do.

11 Q. And what is it, please?

12 A. This is a rebuttal report prepared by myself and
13 by Dr. M. Henry Robison dated May 29th of this year.

14 Q. All right. Before we get into the report,
15 perhaps just do a little quick background work. Can you
16 tell me when you were first hired by Kansas to serve as an
17 expert witness in this matter?

18 MR. DRAPER: While he's thinking about that, I'll
19 just note for the record it is a double-sided copy for
20 purposes of the reporter.

21 MR. BLANKENAU: Thank you, Mr. Draper.

22 THE DEPONENT: I don't remember clearly.

23 Q. (By Mr. Blankenau) Approximately?

24 A. Over a year ago.

25 Q. Okay. Let's just jump right to the report,

6

1 Exhibit 2, then. Could you turn to Page 1, KS1161.

2 A. Yes.

3 Q. And I notice that the introductory paragraph you
4 state that this report is intended to rebut what is in

5 Dr. Sunding's expert report and his deposition; is that
6 correct?

7 A. Correct.

8 Q. Do you have a pen with you? Could you go through
9 your report, take your time, and highlight which portions
10 refer to Dr. Sunding's deposition that you're responding
11 to?

12 A. (Deponent complies.)

13 Q. And can you just tell us how it is you're so
14 indicating? Is it a check mark, a circle?

15 A. I have started with putting a check mark beside
16 the major subject areas which are numbered 1 through 5 or
17 6.

18 Q. Just go through and do that, but if you do
19 deviate from that kind of designation, if you could just
20 state so for the record so that we know what it is you're
21 doing.

22 A. (Deponent complies.)

23 Q. Dr. Hamilton, I just notice that you drew a line
24 -- designating by a line?

25 A. Yes. I was designating by a line the middle of

7

1 Page 5.

2 Q. If you could just talk out loud while you do that
3 just so the record is clear as to what you're designating.

4 A. It was specific reference on Page 5 to -- in his
5 deposition, Pages 73 and 74, Dr. Sunding defended the use

6 of statistical procedures, et cetera.

7 And again on -- toward the top of Page 6 there is
8 a specific reference in his deposition, Pages 125 and 126,
9 and Dr. Sunding again stated that this was a preferred
10 form of his yield regression.

11 Q. You designated that in the exhibit.

12 A. Yes.

13 Again on Page 7, towards the middle, Dr. Sunding
14 argues in his expert report and in his deposition, Pages
15 159 through 161, that a claim for damages from water
16 shortage should be held to the same standards as were the
17 private claims for damages from the private sector oil
18 company -- and so on.

19 Again on Page 8, Professor Sunding focuses on our
20 specific application of the 2006 IMPLAN secondary effects
21 model and alleges we made some miscalculation which
22 results in double counting of results, Page 31 of his
23 expert report and Page 166 of his deposition.

24 Those are the ones which I catch at the moment.

25 There may be others, but . . .

8

1 Q. So there could be other concepts or principles
2 woven through there that aren't so designated?

3 A. Yes.

4 Q. Okay. Well, let's move on then. When did you
5 receive Dr. Sunding's expert report in this matter?

6 A. I suspect it was soon after it was filed. I

7 don't remember the date.

8 Q. From whom did you receive it?

9 A. I believe it was sent to me by Kansas counsel.

10 Q. More specifically, if you recall?

11 A. It would have either been from Mr. Draper or from
12 Grunewald.

13 Q. And by Grunewald you mean Chris Grunewald, the
14 Kansas Assistant Attorney General?

15 A. Correct.

16 Q. Did you receive any instructions specific to that
17 report at that time?

18 A. No.

19 Q. What did you do with the report when you received
20 it?

21 A. I read it.

22 Q. Anything beyond reading it?

23 A. Thought about it, tried to analyze it.

24 Q. Did you also attend Dr. Sunding's deposition?

25 A. Yes, I did.

9

1 Q. And following his deposition did you receive any
2 instructions regarding what you learned at that
3 deposition?

4 A. No.

5 Q. And when did you begin actually working on the
6 rebuttal report itself?

7 A. What do you mean by "working on"?

8 Q. Starting to prepare an actual rebuttal report.

9 A. Putting pen to paper?

10 Q. Yes.

11 A. About a week or ten days prior to the time it was
12 filed.

13 Q. And what caused you to start at that time?

14 A. The results of your conference call with the
15 Special Master.

16 Q. Okay. So counsel informed you it was then
17 necessary for you to prepare a rebuttal?

18 A. Right. And I also read the transcript of that
19 conference call.

20 Q. Okay. Did you provide a draft of your rebuttal
21 report to counsel?

22 A. Yes.

23 Q. Did they provide you with any edits?

24 A. We discussed language.

25 Q. But no specific changes?

10

1 A. No.

2 Q. Did anyone else assist you in preparing this
3 report -- other than Dr. Robison?

4 A. No.

5 Q. Dr. Hamilton, I'm going to hand you a
6 highlighter. Could you go through and highlight in your
7 report the portions of that report that you created?

8 A. I will simply highlight again the section

9 headings.

10 I worked as principal author of Section 1, Use of
11 Market Data.

12 And I'll highlight Section 2, Irrigated Acreage
13 Regressions.

14 And Section 3, Yield Regression.

15 And Section 4, Deep Water Horizon Standards of
16 Documentation.

17 Sections 5 and 6 were jointly written by myself
18 and Dr. Robison.

19 MR. BLANKENAU: Dr. Robison will be pleased to
20 know his deposition got a lot shorter.

21 Q. (By Mr. Blankenau) Dr. Hamilton, did you receive
22 copies of Dr. Sunding's previous depositions in the
23 arbitration proceedings?

24 A. Yes, I did.

25 Q. Do you recall when you received those?

11

1 A. Probably two years ago. It would have been prior
2 to my being hired in this case.

3 Q. Did you also receive any copies of his testimony
4 at the arbitration hearing?

5 A. Yes, I did.

6 Q. And when did you receive that?

7 A. At that same time.

8 Q. Okay. And did you read both of those?

9 A. Yes -- selectively.

10 Q. Let's shift to the Use of Market Data, Section 1
11 of your report, which begins at KS1161.

12 The first item that jumped out at me, if I
13 understood it correctly, is you were concerned that survey
14 data is not real market data; is that correct?

15 A. Yes, that is a concern.

16 Q. And can you tell me how survey data is typically
17 developed?

18 A. It is typically developed by a questionnaire
19 process. That questionnaire process can be highly
20 variable, depending on the context.

21 Q. So, for instance, something like Consumer Price
22 Index, is that survey data?

23 A. Yes.

24 Q. And is that in your view real market data then?

25 A. I would say no.

12

1 Q. Why not?

2 A. It may contain elements of real market data,
3 reported prices from various places, but it also contains
4 elements of opinion from responders.

5 Q. It would be helpful to me if you could tell me a
6 little bit how the Consumer Price Index is developed. If
7 you could just give me a brief overview of that?

8 A. I'm not an expert in the consumer price.

9 Q. You can't give me even the briefest overview?

10 A. I'm not an expert in that -- not that specific

11 index, anyway.

12 Q. Okay. In your view is market data superior to
13 survey data for determining actual value?

14 A. If it's real market data, real observed numbers
15 that are produced by a market, yes.

16 Q. And how would one go about obtaining real market
17 data?

18 A. The prices being offered at an elevator for wheat
19 of a particular grade is real market data.

20 Q. But how would you go about obtaining that for
21 analysis purposes?

22 A. It would require a process of compiling it,
23 collecting it from sources.

24 Q. I guess that's what I'm asking. How would one in
25 your position typically go about obtaining such

13

1 information?

2 A. You would have to make contact with those
3 individuals who had had access to the -- to those numbers.

4 Q. And those individuals would report what to you
5 then?

6 A. A price, a quantity.

7 Q. How is that different from survey data?

8 A. Survey data is in most cases a reliance either on
9 some individual's judgment or -- I could give you an
10 example.

11 Q. Sure.

12 A. The -- one of the reports cited by Dr. Sunding
13 was a report which used land prices in Nebraska, and the
14 prices they used were actual transaction prices. Those
15 were hard numbers reported by the State of Nebraska. They
16 were not anybody's opinion. They were not anybody's
17 expert judgment. They were real prices.

18 Q. Did you go in your initial report and develop any
19 actual market data?

20 A. No.

21 Q. Staying with where we are in the report, KS1161,
22 you have two caveats with respect to the publication cited
23 by Dr. Sunding. Do you see that?

24 A. Yes.

25 Q. To whom do you think those caveats were directed?

14

1 A. Well, they were -- in the first page of each of
2 those reports, I assume they were directed to the readers
3 of the report.

4 Q. And who would those readers likely be?

5 A. Anyone for whom land prices are of interest --
6 potential buyers, potential sellers, real estate people,
7 bankers.

8 Q. With regard to this survey data itself, can you
9 describe for me a little bit of what sort of judgment
10 would go into compiling that information?

11 A. In terms of both of these reports that you're
12 referring to, in each case these were compiled from panels

13 of experts, and they presumably were asked what's their
14 knowledge of land prices and rental rates in respective
15 states.

16 Q. Let's go to the next page. We're on Page 2 of
17 your report, which is Bates identified as KS1162.

18 Do you see about in the middle of that page a
19 reference to a report prepared by Schultz and Schmitz? We
20 have an unfortunate combination of names here today.

21 A. Yes. And that is the report that I was referring
22 to a moment ago.

23 Q. Okay. And can you tell me whether you're aware
24 of any peer reviewed analysis of that report?

25 A. I am not aware of any.

15

1 Q. Let's go to the next page, KS1163.

2 You offer on that page some thoughts regarding
3 the 2011 standing offer from KBID to sell water. Do you
4 see that?

5 A. Yes.

6 Q. Are you saying that the marginal value of the
7 water is not uniform within KBID over the course of the
8 growing season? Is that what that concerns there?

9 A. I don't think that is quite a correct
10 characterization of what I'm saying there.

11 Q. Could you offer a little more illumination on
12 that, please.

13 A. I'm saying that the marginal value of additional

14 water is different late in the season if farmers have
15 already received the full amount of water that they
16 expected to receive. This is an additional increment of
17 water that they were offered late in the season beyond
18 their regular allocation.

19 Q. Would that value change throughout a district, or
20 would it be of a uniform value in both space and time?

21 A. It might vary.

22 Q. A little farther down on that same page you
23 reference some transactions that occurred in Nebraska in
24 2006. Can you describe for me the market for water in
25 Nebraska?

16

1 A. These were transactions between water districts
2 and the State of Nebraska, so they were simply market
3 transactions. It's a limited definition of a market.

4 Q. Did you have an opportunity to look at other
5 transactions in Nebraska, or did you limit it to these?

6 A. I limited it to these. It would not surprise me
7 if there were other transactions, but . . .

8 Q. With respect to these three transactions then,
9 was that water going to be put to an actual beneficial
10 consumptive use?

11 A. Regarding -- this is with regard to the Nebraska
12 transactions?

13 Q. Yes. Those three transactions that we were just
14 talking about.

15 A. I'm assuming that these transactions were
16 motivated by the desire of Nebraska to conform to the
17 terms of final settlement agreement -- final settlement
18 stipulation. In that sense I'm assuming the proposed use
19 was beneficial.

20 Q. Was it a consumptive use for Nebraska?

21 A. I don't know anything about the hydrology of
22 where this particular water went.

23 Q. So you don't know whether it was applied to crops
24 or whether it was sent down to Kansas or what it was used
25 for.

17

1 A. No. I have not tracked that.

2 Q. Okay. Well, then let's consider perhaps other
3 transactions that might have occurred in Nebraska. Did
4 you make any study of the Nebraska water market in the
5 Republican River Basin?

6 A. No, I did not.

7 Q. From what you know, is the market for water the
8 same in Kansas as it is in Nebraska?

9 A. I don't know.

10 Q. Okay. Let me switch gears real quickly. In the
11 arbitration proceeding Dr. Sunding offered extensive
12 testimony in market data. Can you explain to me why that
13 wasn't addressed in your initial report?

14 A. I considered the approach that I took a superior
15 approach to Sunding's approach. And as I indicate in my

16 report, I don't really consider the data he used to be
17 market data.

18 MR. BLANKENAU: Okay. I know it's still early,
19 but we're done with Section 1 of your report, we're
20 already one-quarter of the way through. Why don't we take
21 about a ten-minute break here, if that's okay with you
22 gentlemen.

23 (Recess taken 9:37 a.m. to 9:53 a.m.)

24 Q. (By Mr. Blankenau) Let's move on to Section 2 of
25 your report that begins at KS1164. The title of the

18

1 section is Irrigated Acreage Regression.

2 One of the concerns that I believe you raised was
3 the accuracy of the KBID crop surveys; is that correct?

4 A. I raise that issue, yes.

5 Q. Okay. What exactly was your concern?

6 A. I guess my concern is that, one, it's survey
7 data. My concern is also that Professor Sunding
8 characterized it as market data.

9 And, number one, it's not a -- not data produced
10 by a market. Neither acreage, which is the focus of this
11 section, nor yields, which are the focus of the following
12 section, are market variables. They're not variables
13 produced by a market.

14 Q. Did you have an opportunity to meet with any of
15 the farmers in KBID to determine the accuracy of the
16 surveys?

17 A. We did meet with farmers in KBID. We did not --
18 the focus of discussion was not on the accuracy of the
19 survey numbers.

20 Q. These are just conversations with farmers?

21 A. These were conversations with farmers,
22 understanding their practices and how the system worked.

23 Q. How many farmers did you meet with?

24 A. Probably eight or ten in total.

25 Q. And were these just sort of incidental meetings

19

1 or were these planned meetings?

2 A. Both.

3 Q. And how many were incidental contacts?

4 A. Very few. Most of them -- we had several planned
5 sessions where people were invited.

6 Q. And where did these interviews take place?

7 A. I can't remember clearly. I think -- well, I
8 can't remember clearly.

9 Q. Was it in the KBID region or was it --

10 A. Yes, it was in the KBID region.

11 Q. Okay. Have you done anything further to examine
12 the validity of the KBID survey data?

13 A. No.

14 Q. It's -- your concern then is it's more of a
15 general one relating to surveys?

16 A. Yes. And the concern I expressed, that it's not
17 data that's the product of a market.

18 Q. Well, let's then jump to the next section,
19 Section 3, which begins at KS1166. Do you have that
20 section?

21 A. Yes, I do.

22 Q. Generally can you tell us what "yield regression"
23 is?

24 A. A yield regression, as presented by Dr. Sunding,
25 is a linear equation that relates yield as a function of

20

1 some variables which Professor Sunding determined should
2 be determinants of yield.

3 Q. So is this something that can be expressed
4 graphically and mathematically?

5 A. Right. It's a linear function. And a linear
6 regression means that a statistical process is used to
7 estimate the coefficients of that linear function.

8 Q. Explain that a little bit to me -- for those of
9 us who are non-economists.

10 A. Well, a linear function will generally have an
11 intercept. It will have -- you know, if one thinks of it
12 graphically will have a slope. And the linear regression
13 statistical procedure, it involves using the data to
14 estimate values for that intercept and the slope.

15 Q. Staying on that same page -- I believe it's the
16 third paragraph -- where you again express concerns
17 regarding --

18 A. Which page are you on?

19 Q. This is Page 6 of your report, KS1166, about the
20 third paragraph of that same section.

21 A. I found it, yes.

22 Q. It seems to me you again raise the concern that
23 KBID annual reports might not produce accurate
24 information; is that correct?

25 A. Yes, I see that.

21

1 Q. On that same page, the next paragraph, you state,
2 "In order to estimate damages, we need predictions of
3 actual (not transformed) KBID crop yields."

4 Can you explain that to me? I guess what do you
5 mean by "actual"?

6 A. I'm pausing because you used the word "actual."
7 I'm trying to figure out where that word was.

8 Q. Take as much time as you need. It is the fourth
9 paragraph, the eighth line down. Do you see that?

10 A. The word "actual" in there -- well, one should
11 take together the phrase "predictions of actual." What we
12 are trying to do is to -- or what Dr. Sunding was trying
13 to do was build a model which allowed him to predict the
14 yield -- or in this case the yields that would apply under
15 particular conditions.

16 Dr. Sunding did not really do that. He did not
17 -- he presented one predicted yield. He has a table.

18 Q. But I want to make sure I understand what you
19 mean by "actual yields" in the sentence.

20 A. "Predicted actual yield." The actual, according
21 to Dr. Sunding, are the yields from the annual reports.

22 Q. Okay.

23 A. His model is capable of, with more or less
24 accuracy, predicting the actual yields.

25 Q. Okay. Let's move to Section 4 then. This is at

22

1 KS1167.

2 A. I have that.

3 Q. All right. You state that this case is not about
4 individual damages. That's in the first bullet point of
5 that section.

6 A. I see that.

7 Q. Can you explain to us how individual farming
8 interests differ from individual resort interests or
9 something like that along the Gulf Coast?

10 A. I believe I presented them as being similar or
11 parallel.

12 Q. Okay. So you would say that in looking at
13 individual damages from say the Gulf Coast oil spill would
14 be a comparable situation to what you're examining here in
15 this proceeding?

16 A. I am saying that the damages suffered by an
17 individual resort on the Gulf Coast are similar to the
18 damages suffered by an individual Kansas farmer because of
19 water shortage. But I'm saying that the interests of
20 Kansas extend beyond those individual damages suffered by

21 individual Kansas farmers.

22 Q. And what would those interests be then?

23 A. They are the interests of the businesses that

24 sell inputs to the affected farmers. They are the

25 businesses that sell to the suppliers of inputs. They are

23

1 farm labor that would not normally be counted in the

2 individual effects on farmers.

3 Q. And how would those interests be addressed in

4 this proceeding?

5 A. The broader interests beyond the farm gate are

6 measured using the input-output models. IMPLAN models,

7 which we used in our analysis, those are the secondary

8 effects.

9 Q. And those would be a quantification of those

10 interests; is that correct?

11 A. That is correct.

12 Q. But what happens to that money once it is

13 obtained -- if it is obtained?

14 A. What money?

15 Q. The damages that you calculated.

16 A. What happens -- I'm not --

17 Q. You've done the right thing. You don't

18 understand the question.

19 If your assessment of damages turns out to be

20 accepted by the Special Master in the Supreme Court and

21 the State of Kansas receives these monies, what happens to

22 it?

23 A. My understanding is that the money goes to the
24 State of Kansas. My understanding is that the money which
25 Kansas obtained from Colorado in the Ark River case went

24

1 to -- entirely to State level entities. Part of it was
2 used for improvements in the Ark River case, and part of
3 it I'm not quite sure where it went. But it goes to the
4 State, not to the affected individuals.

5 Q. Does it go to any of the businesses that are
6 affected?

7 A. Not directly.

8 Q. Does it go indirectly?

9 A. I guess that would be a decision up to the State
10 of Kansas.

11 Q. If Kansas chose not to provide it to those
12 individuals, how would that damage claim address their
13 concerns?

14 A. The water is the property of the State of
15 Kansas. Farmers have a use right. It's the interests of
16 the State of Kansas that we're talking about.

17 Q. If I understand your report, you based your
18 damage calculation on the effect of individuals in those
19 secondary users, correct?

20 A. That is correct.

21 Q. And if those individuals, the secondary users,
22 don't receive the money directly, how are the concerns of

23 Kansas met? Your initial premise is not concerned then,

24 is it?

25 A. My understanding is that how any damages award is

25

1 handled is up to the State.

2 Q. I understand that. I guess I'm trying to hit

3 more directly to the premise of your damages, just to

4 reward the interest of the State of Kansas, which if I

5 understand you correctly is the harm inflicted upon the

6 individual users and the secondary users. If they're not

7 compensated, how is your premise then supported by that

8 action?

9 A. The harm suffered by the directly impacted

10 individuals and the secondarily impacted individuals is a

11 measure of the value of the water to Kansas.

12 Q. Okay.

13 A. It's the indication of the value of water.

14 Q. So an indication of value is not a direct measure

15 of the actual harm to the State of Kansas?

16 A. The actual harm is a measure of the value of

17 water.

18 Q. To whom is that?

19 A. To the State of Kansas whose water it is.

20 Q. So you then don't know whether the money will be

21 spent in Kansas or whether it will simply be removed from

22 the Kansas economy somewhere.

23 A. Can you repeat that?

24 Q. Sure. You don't know whether any of the damages
25 that Kansas might receive will be spent in the state of

26

1 Kansas or whether those monies will be spent elsewhere?

2 A. I would assume that it will be spent in the state
3 of Kansas. One can assume that -- well, there are many
4 options.

5 If it goes into the State general fund, it could
6 result in the need for less taxes. It could be spent
7 on --

8 Q. Oh, come on now, would a politician take less
9 taxes?

10 But could those monies be spent, say, on child
11 care or education or any one of a number of other things?

12 A. I believe it's up to the State of Kansas as to
13 how that is spent. One can presume that Kansas likes to
14 buy things locally.

15 Q. At the top of Page 8 of your report, KS1168, that
16 whole bullet point at the top. Do you see that?

17 A. Yes.

18 Q. Where you state, "We know the magnitude of the
19 water shortfall through the Accounting Procedures
20 established by the Final Settlement Stipulation."

21 Do you see that?.

22 A. Yes, I see that.

23 Q. Were you aware that the final RRCA accounting
24 figures for 2006 had not been finalized or adopted?

25 A. No.

27

1 Q. If that number were to change, would that alter
2 the final result of your analysis?

3 A. If the inputs were to change, the outputs would
4 change.

5 Q. If Nebraska had made a payment for primary
6 damages in 2007 for any shortfalls that occurred in 2005
7 or 2006, would your conclusions change?

8 A. I guess I'm not following where you're going.

9 Q. If Kansas had come forward with a damage amount
10 to Nebraska in 2007 and Nebraska had paid at that time,
11 how would that change your conclusions?

12 A. Oh, I would assume that -- and you're talking
13 about a damage payment for both '05 and '06?

14 Q. Either one -- one or both.

15 A. I don't know enough about how the hydrology
16 models work and so on with the various complicated two
17 years and three years and four year mechanisms to know
18 whether a payment that might have been made in '07 might
19 have erased all claims that might result through the
20 different kinds of averaging.

21 Q. Right.

22 A. It might or it might not. I don't know. It
23 depends on how it works through the formulas and the
24 models.

25 Q. Can you again tell me when you first began

28

1 working on your rebuttal report?

2 A. We first started putting pen to paper on the
3 afternoon of the -- your conference call with the Special
4 Master, which is about a week or so before the date on
5 which the report was filed.

6 Q. Okay.

7 (Deposition Exhibit 3 was marked.)

8 Q. (By Mr. Blankenau) Dr. Hamilton, can you look at
9 what's been marked as Exhibit 3.

10 A. I see it.

11 Q. Do you know what that is?

12 A. Yes. This is an output from the STATA
13 statistical package outlining the results from -- I
14 believe it is Sunding's yield regression.

15 Q. And this is something that you used with regard
16 to your rebuttal report?

17 A. Yes, it is.

18 Q. Can you explain the date of April 2nd, 2012 at
19 the top?

20 A. This is a version of the regression. As you will
21 remember, Professor Sunding did not include a copy of his
22 regression output with his report. In preparation for
23 Professor Sunding's deposition I had an acquaintance who
24 had access to STATA run the model through the statistical
25 package so that I would have a copy with me in preparation

29

1 for attending Dr. Sunding's deposition.

2 Q. I'm a little -- all right.

3 (Deposition Exhibit 4 was marked.)

4 Q. (By Mr. Blankenau) Do you recognize that
5 document, Dr. Hamilton?

6 A. This is work that was done by Dr. Robison --
7 let's see.

8 Q. It indicates --

9 A. Yeah. I'm having difficulty recognizing what
10 this is. What specifically is this?

11 Q. It indicates -- the second line at the top --
12 it's a summary of Sunding simulation?

13 A. Yes.

14 Q. Is it ringing a bell to you at all?

15 A. Yes. But I don't recognize this particular page
16 of this -- can I assume this is some sort of stuff that's
17 hidden within an Excel file?

18 Q. I wouldn't ask you to assume anything.

19 A. I have not seen this particular page. I can
20 recognize, I think, the graphic, which is kind of faded
21 away up in the top.

22 It appears that somebody has gone in and looked
23 at some properties which are attached to this Excel file
24 and printed out some miscellaneous dates and so on.

25 Q. Look toward "Related People." Do you see that

1 where it indicates the author last modified by?

2 A. Yes.

3 Q. And it's -- who was the author and who was it
4 last modified by -- according to this document?

5 A. I believe this is some work which was prepared by
6 Dr. Robison, and I think I probably changed the format of
7 it -- changed the column widths and maybe changed the
8 headings to conform to the format that I was using in the
9 rest of my report.

10 Q. Why would the author be identified as you then?

11 A. Because I probably last saved it.

12 Q. Okay.

13 A. This is a file that was provided to me by
14 Dr. Robison, and I did the editing to insert it into our
15 joint report.

16 Q. Okay. Are you aware of any other such tables or
17 attachments to your report that were prepared by one of
18 you and modified by the other?

19 A. It is possible.

20 Q. But you're not aware specifically?

21 A. I'm not aware specifically.

22 Q. Why don't you just take a moment and go through
23 it to see if anything rings a bell with you -- Exhibit 2,
24 and I think these all start at KS1174.

25 A. Well, I can say to the best of my knowledge all

1 of these up through -- up through KS1186 I believe were
2 exclusively produced by me.

3 Q. And they were not modified by anyone?

4 A. Right. The ones following that of Dr. Robison's
5 format for producing documents tends to be slightly
6 different from what I like to do, so I -- with any of
7 these I may well have reformatted them to the way I like
8 to do it.

9 Q. But you're confident it would just be a
10 formatting issue as opposed to a substantive change?

11 A. Well, the -- on 1188, 1189 you'll see some red
12 highlighting. That is mine.

13 And I believe that's the only thing that could be
14 considered substantive.

15 Q. Okay. Do you recall how many hours you spent
16 working on this report?

17 A. Oh, geez, I would believe at least 30, maybe 40.
18 It was a hectic week.

19 MR. BLANKENAU: If it's all right with you, why
20 don't we take a ten-minute break.

21 (Recess taken 10:25 a.m. to 10:43 a.m.)

22 Q. (By Mr. Blankenau) I just wanted to clarify a
23 couple of things with you, Dr. Hamilton, if I might.

24 Do you still have Exhibit 2 before you, that's
25 your report?

32

1 A. Yes, I do.

2 Q. Could you turn to Page KS1165, Page 5.

3 A. Yes, I have it.

4 Q. In the portion where you refer to Dr. Sunding's
5 deposition -- it's that paragraph. Do you see that?

6 A. Yes.

7 Q. You provide us some discussion of the root mean
8 square error for the regression.

9 A. Yes.

10 Q. Is that a common practice to use some tool to
11 evaluate the potential error?

12 A. Yes. It is a common practice and is one of the
13 ones that I often used in my 30 years of teaching
14 regression analysis.

15 Q. And with regards to the models that you employed,
16 what tool did you use to evaluate your margin of error?

17 A. The -- can you repeat that, please?

18 Q. Sure. What tools did you use to evaluate the
19 margin of error with respect to the models you use?

20 A. You're referring to the yield models and the
21 secondary impact models?

22 Q. Correct.

23 A. These are what are referred to as deterministic
24 models which do not result in estimates of standard
25 errors.

33

1 Q. Okay. So you didn't apply any sort of comparable
2 measure with respect to your own models; is that correct?

3 A. Deterministic models are evaluated in terms of
4 the reasonableness of their assumptions, and the

5 reasonableness of their outputs. They do not provide
6 standard errors.

7 Q. Reasonableness based upon what?

8 A. Reasonableness of the assumptions, conformance
9 to economic theory, experience with the application of
10 similar models and other circumstances.

11 Q. And who determines reasonableness?

12 A. The analyst determines reasonableness, the wider
13 literature surrounding the use of particular techniques
14 determines reasonableness.

15 Q. Maybe just a minor point, but do you view water
16 as water that is -- is irrigation water the same as
17 precipitation?

18 A. No.

19 Q. Under what circumstances are they different?

20 A. Precipitation may not all be effective. My
21 understanding is that Kansas is subject to extreme events
22 where the precipitation may run off. Precipitation does
23 not necessarily occur in the same time sequence as needs
24 of crops.

25 This is not my particular area, so I hesitate to

34

1 go any further than that, but those points I stand on.

2 Q. Well, let me just flip that then and say in the
3 same realm, does irrigation water always be effected -- or
4 is it always effected?

5 A. No. Excess irrigation water can run off, excess

6 irrigation water can percolate to groundwater.

7 MR. BLANKENAU: I think we're done. Thank you so
8 much. The next time it will be in Moscow.

9 (The deposition concluded at 10:48 a.m.)

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

35

1 I, JOEL HAMILTON, PH.D, do hereby certify that I
2 have read the foregoing transcript and that the same and
3 accompanying correction sheets, if any, constitute a true
4 and complete record of my testimony.

5

6

JOEL HAMILTON, PH.D

() No Changes () Amendments attached

Subscribed and sworn to before me this _____ day of

_____, 2012

My commission expires: _____

Notary Public

State of Kansas v. State of Nebraska and State of Colorado

36

1 STATE OF COLORADO)

2) ss. REPORTER'S CERTIFICATE

3 COUNTY OF LARIMER)

4 I, Katherine Richmond, hereby certify that

5 I am a Certified Shorthand Reporter and Notary Public

6 within and for the State of Colorado; that previous to the

7 commencement of the examination, the deponent was duly

8 sworn to testify to the truth.

9 I further certify that this deposition was
10 taken in shorthand by me at the time and place herein set
11 forth and was thereafter reduced to typewritten form, and
12 that the foregoing constitutes a true and correct
13 transcript.

14 I further certify that I am not related to,
15 employed by, nor of counsel for any of the parties or
16 attorneys herein, nor otherwise interested in the result
17 of the within action.

18 My commission expires December 16, 2015.

19

20

21

22 _____
Katherine Richmond, CSR

23

24

25

37

1 PATTERSON REPORTING & VIDEO
2170 South Parker Road, Suite 263
2 Denver, Colorado 80231

3 June 27, 2012

4

JOHN R. DRAPER, ESQ.
5 Montgomery & Andrews, PA
325 Paseo de Peralta
6 Santa Fe, New Mexico 87501

7 Case Name: State of Kansas v. State of Nebraska, et al.
Case No. No. 126, Original
8 Deposition of JOEL HAMILTON, PH.D

9 The deposition in the above-entitled matter is ready for
reading and signing. Please attend to this matter by
10 complying with ALL blanks checked below:

11 _____ arrange with us at (303) 696-7680 to read and sign
the deposition in our office

12
OR (if applicable),

13
14 _____XX_____ have deponent read your copy; signing attached
original signature page and any amendment sheets.

15 _____ read enclosed deposition, sign attached signature
page and any amendment sheets.

16
17 _____XX_____ within 35 days of the date of this letter

18 _____ by _____ due to trial date of _____

19 Please be sure that the original signature page and
amendment sheets, if any, are SIGNED BEFORE A NOTARY
20 PUBLIC and returned to our office at the above address.

21 If this matter has not been taken care of within said
period of time, the deposition will be filed unsigned
22 pursuant to the Rules of Civil Procedure.

23 Thank you.

24 Enclosures: (As above noted)
cc: Don Blankenau, Esq.; Scott Steinbrecher, Esq.

25

38

1 PATTERSON REPORTING & VIDEO
2170 South Parker Road, Suite 263
2 Denver, Colorado 80231

3 DON BLANKENAU, ESQ.
Blankenau Wilmoth LLP
4 206 South 13th Street, Suite 1425
Lincoln, Nebraska 68508

5
Re: State of Kansas v. State of Nebraska, et al.

6
Dear Mr. Blankenau:

7
Enclosed is the original deposition of JOEL HAMILTON, PH.D

8
9 _____ Signed, no changes

10 _____ Signed, with changes, copy attached.
11 _____ no signature required.
12 _____ Reading anmd signing not requested pursuant to
13 C.R.C.P. Rule 30(e).
14 _____ Signature waived.
15 XX Forwarding original transcript unsigned; signature
16 page and/or amendments will be forwarded, if
17 received.
18 _____ Original exhibits included in ongoing notebook and
19 will be filed with counsel at conclusion of
20 discovery.
21 _____ Via Email
22
23
24
25
Enclosures: (As above noted)
Cc: John B. Draper, Esq.; Scott Steinbrecher, Esq.